

ABSTRACT

An FPD fabricating apparatus according to the present invention comprises two chambers of a process chamber 130 and a transfer chamber 120. The substrate 140 is mounted on and transferred by one of two carrier plates 150a and 150b, each of which have a forked shape. The carrier plate lift pins 160b are raised up and fallen down while avoiding contact with the forked prongs of the robot arm 122a, so that the carrier plates 150a and 150b can be raised up and fallen down. The substrate lift pins 160a which are raised up and fallen down while avoiding contact with all the forked prongs of the robot arm 122a and the carrier plates 150a and 150b, so that only the substrate 140 mounted on the carrier plates 150a and 150b can be raised up and fallen down. According to the present invention, a load-lock chamber for transferring a substrate and a transfer chamber is incorporated into a single transfer chamber, so that space of the apparatus can be remarkably reduced and cost of the apparatus can be reduced. In addition, since the substrate is raised up and fallen down by using the carrier plates 150a and 150b, even large-area substrate can be stably transferred at high speed without bending, disrupting or vibration of the substrate.